



TSB---HAL-Init-Process



Sayali Kothari
Contractor

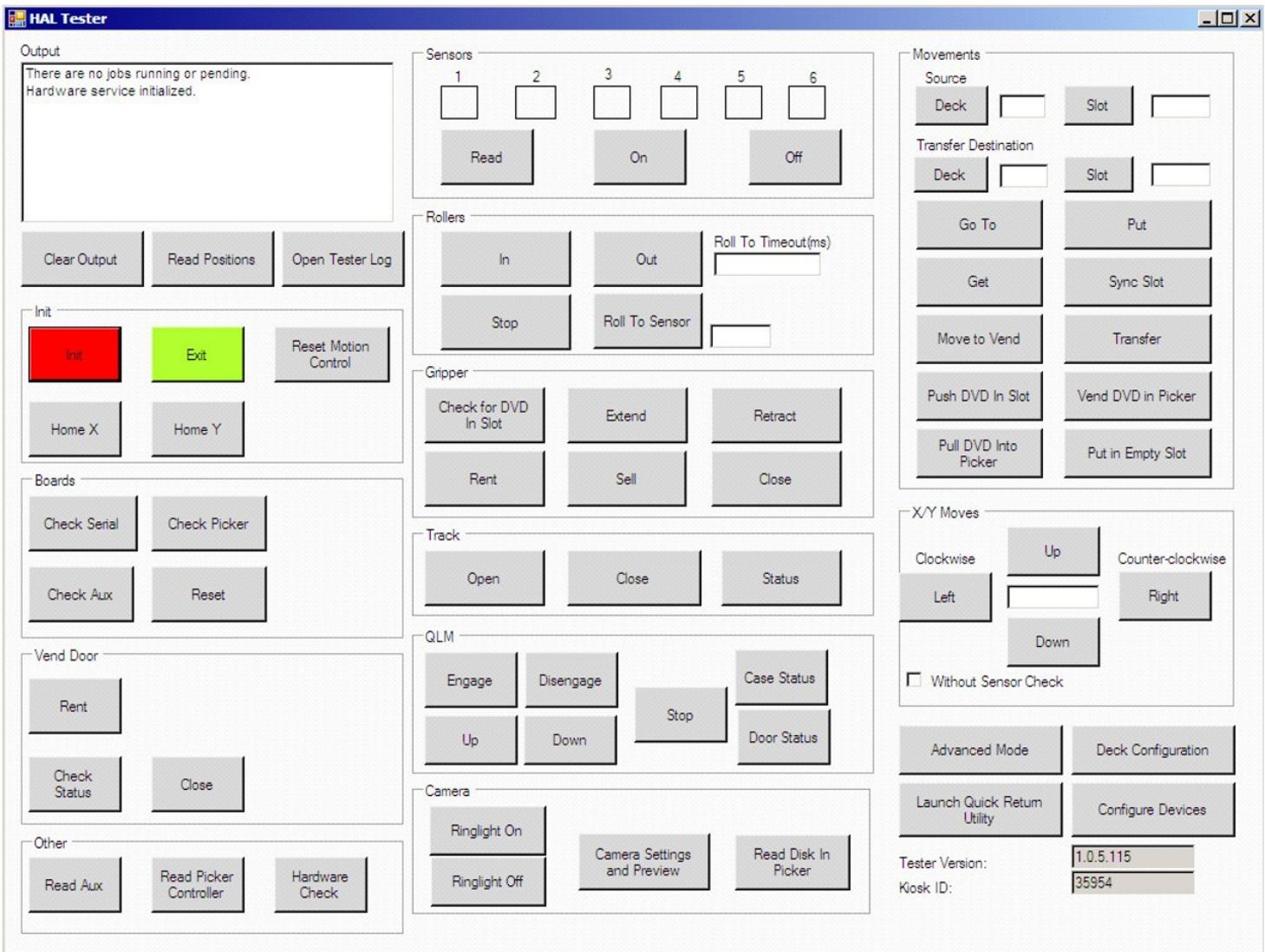
Date Issued:

04/08/2011

Date

Updated: 08/23/2011

Description: This is a breakdown of the init job and processes.



Init Job Script

1. **INIT START**- Init script waits for the COM ports to come up. The time it waits is controlled by the controller option COMPortInitSleepTime. In Fisher, this will only happen during the bootstrap init.
2. **RESET CONTROLLERS**- Resets three system boards (Picker Controller Board, Auxiliary Board and Serial Board). The main reset LED on the Picker Controller Board will blink and then turn off.
3. **GET VERSION INFO**- Gathers version stamp from each board
4. **SET START STATE**- Gathers information about the current state of the machine such as sensors that are triggered.
5. **TEST TRACK**- Communicates with picker controller board to check track status (tests track open and close).
6. **CLOSE VEND DOOR IF OPEN**- Communicates with auxiliary board (tests to see if vend door is closed).

7. TEST GRIPPER- Tests all gripper movement (calls gripper retract, followed by gripper open/close/rent)
8. CHECK PICKER STATUS- Sees if picker is EMPTY or FULL. If FULL step 9 is bypassed and continues with step 10.
9. CHECK ROLLERS- Tests the picker sensors and rollers (sensor picker-on, roller in, wait 2000 ms, roller out, wait 2000 ms, roller stop and sensor picker off).
10. CHECK RINGLIGHT- Tests the ring light(ring light on, wait 2000, ring light off)
11. CHECK OBSTRUCTIONS- Tries to ensure gripper is clear. If sensors 1 or 6 are triggered, it may try to put a DVD back into the slot or bring the DVD back into the center of the picker to continue with initialization.
12. HOME X MOTOR- Rotates drum until the flag trips the sensor twice. In Fisher, the two rotations will be a move of 200 units off the home flag to ensure 1 full rotation if it was originally at home.
13. HOME Y MOTOR- Moves to home y sensor to zero out the picker.
14. MOVE TO VEND- Moves picker to vend position.
15. CheckPickerStart- Checks to see if something needs to be put away and if so puts it away.
16. CheckPickerStop- If the picker is empty the check picker script ends.
17. Init Stop- Init script ends

